

IN THE CLAIMS:

Please substitute the following claims for the same-numbered claims in the application:

1. (Previously Presented) A method of establishing transmission headers for stateless group communication of data packets to nodes in a distribution tree, said method comprising:

encoding said distribution tree to produce an encoded distribution tree;

creating a header including said encoded distribution tree;

adding said header to a data packet to be distributed to said distribution tree,

wherein said nodes in said distribution tree lack group state information; and

modifying said header as said data packet is distributed down said distribution tree to remove encoded information concerning upper distribution levels of said distribution tree.

2. (Cancelled).

3. (Currently Amended) The method ~~in~~ according to claim 1, all the limitations of which are incorporated herein by reference, further comprising decoding a portion of said encoded distribution tree as a node receives said data packet and re-encoding said encoded distribution tree as said node passes said data packet to another node down said

distribution tree.

4. (Currently Amended) The method ~~in~~ according to claim 1, all the limitations of which are incorporated herein by reference, wherein said distribution tree controls the order in which said nodes receive said data packets.

5. (Currently Amended) The method ~~in~~ according to claim 4, all the limitations of which are incorporated herein by reference, wherein by controlling the order in which said nodes receive said data packets, said encoded distribution tree permits said nodes to process said data packets upon receipt.

6. (Currently Amended) The method ~~in~~ according to claim 1, all the limitations of which are incorporated herein by reference, further comprising, prior to said encoding process, creating said distribution tree at a sender node based upon a dynamic group of receiver nodes.

7. (Currently Amended) The method ~~in~~ according to claim 1, all the limitations of which are incorporated herein by reference, wherein said encoding comprises sequentially entering addresses of nodes during a per-level traversal of said distribution tree starting from the root of said distribution tree.

8. (Previously Presented) A method of establishing transmission headers for stateless group communication of data packets to nodes in a distribution tree, said method comprising:

encoding said distribution tree to produce an encoded distribution tree;

creating a header including said encoded distribution tree;

adding said header to a data packet to be distributed to said distribution tree,

wherein said nodes in said distribution tree lack group state information;

processing said encoded distribution tree at each node of said nodes, thereby indicating to which node of said nodes said data packet should be next transferred; and

modifying said header as said data packet is distributed down said distribution tree to remove encoded information concerning upper distribution levels of said distribution tree.

9. (Cancelled).

10. (Currently Amended) The method ~~in~~ according to claim 8, all the limitations of which are incorporated herein by reference, further comprising decoding a portion of said encoded distribution tree as a node receives said data packet and re-encoding said encoded distribution tree as said node passes said data packet to another node down said distribution tree.

11. (Currently Amended) The method ~~in~~ according to claim 8, all the limitations of which are incorporated herein by reference, wherein said distribution tree controls the order in which said nodes receive said data packets.

12. (Currently Amended) The method ~~in~~ according to claim 11, all the limitations of which are incorporated herein by reference, wherein by controlling the order in which said nodes receive said data packets, said encoded distribution tree permits said nodes to process said data packets upon receipt.

13. (Currently Amended) The method ~~in~~ according to claim 8, all the limitations of which are incorporated herein by reference, further comprising, prior to said encoding process, creating said distribution tree at a sender node based upon a dynamic group of receiver nodes.

14. (Currently Amended) The method ~~in~~ according to claim 8, all the limitations of which are incorporated herein by reference, wherein said encoding comprises sequentially entering addresses of nodes during a per-level traversal of said distribution tree starting from the root of said distribution tree.

15. (Previously Presented) A method of stateless group communication of data packets to nodes in a distribution tree, said method comprising:

encoding said distribution tree to produce an encoded distribution tree;
creating a header including said encoded distribution tree; and
adding said header to a data packet to be distributed to said distribution tree,
wherein said nodes in said distribution tree lack group state information;
decoding a portion of said encoded distribution tree as a node of said nodes
receives said data packet; and
re-encoding said encoded distribution tree as said node passes said data packet to
another node of said nodes down said distribution tree,
wherein said decoding and said re-encoding modify said header as said data
packet is distributed down said distribution tree to remove encoded information
concerning upper distribution levels of said distribution tree.

16. (Cancelled).

17. (Currently Amended) The method ~~in~~ according to claim 15, all the limitations of which are incorporated herein by reference, wherein said distribution tree controls the order in which said nodes receive said data packets.

18. (Currently Amended) The method ~~in~~ according to claim 17, all the limitations of which are incorporated herein by reference, wherein by controlling the order in which

said nodes receive said data packets, said encoded distribution tree permits said nodes to process said data packets upon receipt.

19. (Currently Amended) The method ~~in~~ according to claim 15, all the limitations of which are incorporated herein by reference, further comprising, prior to said encoding process, creating said distribution tree at a sender node based upon a dynamic group of receiver nodes.

20. (Currently Amended) The method ~~in~~ according to claim 15, all the limitations of which are incorporated herein by reference, wherein said encoding comprises sequentially entering addresses of nodes during a per-level traversal of said distribution tree starting from the root of said distribution tree.

21. (Previously Presented) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform a method of establishing transmission headers for stateless group communication of data packets to nodes in a distribution tree, said method comprising:

encoding said distribution tree to produce an encoded distribution tree;

creating a header including said encoded distribution tree;

adding said header to a data packet to be distributed to said distribution tree,

wherein said nodes in said distribution tree lack group state information; and

modifying said header as said data packet is distributed down said distribution tree to remove encoded information concerning upper distribution levels of said distribution tree.

22. (Cancelled).

23. (Currently Amended) The program storage device ~~in~~ according to claim 21, all the limitations of which are incorporated herein by reference, wherein said method further comprises decoding a portion of said encoded distribution tree as a node receives said data packet and re-encoding said encoded distribution tree as said node passes said data packet to another node down said distribution tree.

24. (Currently Amended) The program storage device ~~in~~ according to claim 21, all the limitations of which are incorporated herein by reference, wherein said distribution tree controls the order in which said nodes receive said data packets.

25. (Currently Amended) The program storage device ~~in~~ according to claim 24, all the limitations of which are incorporated herein by reference, wherein by controlling the order in which said nodes receive said data packets, said encoded distribution tree permits said nodes to process said data packets upon receipt.

26. (Currently Amended) The program storage device ~~in~~ according to claim 21, all the limitations of which are incorporated herein by reference, wherein said method further comprises, prior to said encoding process, creating said distribution tree at a sender node based upon a dynamic group of receiver nodes.

27. (Currently Amended) The program storage device ~~in~~ according to claim 21, all the limitations of which are incorporated herein by reference, wherein said encoding comprises sequentially entering addresses of nodes during a per-level traversal of said distribution tree starting from the root of said distribution tree.

28. (Currently Amended) The method ~~in~~ according to claim 1, all the limitations of which are incorporated herein by reference, wherein said lack of said group state information reduces a signaling of a control path and adds flexibility of dynamic modification of said communication trees.

29. (Currently Amended) The method ~~in~~ according to claim 8, all the limitations of which are incorporated herein by reference, wherein said lack of said group state information reduces a signaling of a control path and adds flexibility of dynamic modification of said communication trees.

30. (Currently Amended) The method ~~in~~ according to claim 15, all the limitations of

which are incorporated herein by reference, wherein said lack of said group state information reduces a signaling of a control path and adds flexibility of dynamic modification of said communication trees.

31. (Currently Amended) The program storage device ~~in~~ according to claim 21, all the limitations of which are incorporated herein by reference, wherein said lack of said group state information reduces a signaling of a control path and adds flexibility of dynamic modification of said communication trees.